

Claims

[c1] What is claimed is:

1. A method for writing an optical disk using an optical disk drive comprising:

determining a final start delay time of a laser pulse used by the optical disk drive to write a pit on the optical disk, the final start delay time of the laser pulse used to write the pit being determined as a first value when there is a 3-period land previous to the pit, the final start delay time of the laser pulse used to write the pit being determined as a second value, which is less than the first value, when there is a non-3-period land previous to the pit; and

writing the pit according to the laser pulse of the optical disk drive.

[c2] 2. The method of claim 1 wherein the final start delay time comprises a start delay time and a start complement determined according to a land previous to the pit with the final start delay being the difference between the start delay time and the start complement.

[c3] 3. The method of claim 2 further comprising:
determining the start delay time of the pit, the start de-

lay time of the pit being determined as a third value when the pit is a 3-period pit, the start delay time of the pit being determined as a fourth value, which is larger than the third value, when the pit is a non-3-period pit.

- [c4] 4. The method of claim 2 further comprising:
determining the start complement of the pit, the start complement of the pit being determined as a fifth value when there is a 3-period land previous to the pit, the start complement of the pit being determined as a sixth value, which is larger than the fifth value, when there is a non-3-period pit previous to the pit.
- [c5] 5. The method of claim 1 wherein the non-3-period land is one of 4 to 11 periods lands.
- [c6] 6. The method of claim 3 wherein the non-3-period pit is one of 4 to 11 periods pits.
- [c7] 7. The method of claim 1 utilized as a write strategy parameter for a specific burning speed of the optical disk drive, and then applying the write strategy parameter to different burning speeds.
- [c8] 8. A method for writing an optical disk using an optical disk drive comprising:
determining a final start delay time of laser pulses used by the optical disk drive to write a plurality of pits on the

optical disk, the final start delay time of a 3-period pit being less than the final start delay time of a non-3-period pit when there are lands with the same period before the plurality of pits respectively; and writing the optical disk according to the settings of the laser pulse used by the optical disk drive.

- [c9] 9. The method of claim 8 wherein the final start delay time comprises a start delay time and a start complement determined according to a land previous to the pit with the final start delay being the difference between the start delay time and the start complement.
- [c10] 10. The method of claim 9 further comprising:
determining a start delay time of the pit, the start delay time of the pit being determined as a first value when the pit is a 3-period pit, the start delay time of the pit being determined as a second value larger than the first value when the pit is a non-3-period pit.
- [c11] 11. The method of claim 9 further comprising:
determining a start complement of the pit, the start complement of the pit being determined as a third value when there is a 3-period land previous to the pit, the start complement of the pit being determined as a fourth value larger than the third value when there is a non-3-period pit previous to the pit.

- [c12] 12. The method of claim 8 wherein the non-3-period land is 4 to 11 periods.
- [c13] 13. The method of claim 11 wherein the non-3-period pit is 4 to 11 periods.
- [c14] 14. The method of claim 8 utilizing a write strategy parameter for a specific burning speed of the optical disk drive and then applying the write strategy parameter to different burning speeds.
- [c15] 15. A method for writing an optical disk using an optical disk drive comprising:
determining a final end delay time of a laser pulse used by the optical disk drive to write a pit on the optical disk, the final end delay time of the laser pulse of the pit being determined as a first value when there is a 3-period land following the pit, the final end delay time of the laser pulse of the pit being determined as a second value larger than the first value when there is a non-3-period land following the pit; and
writing the pit according to the laser pulse of the pit used by the optical disk drive.
- [c16] 16. The method of claim 15 wherein the final end delay time comprises an end delay time and an end complement determined according to a land following the pit

with the final end delay being the difference between the end delay time and the end complement.

- [c17] 17. The method of claim 16 further comprising:
determining the end delay time of the pit, the end delay time of the pit being determined as a third value when the pit is a 3-period pit, the end delay time of the pit being determined as a fourth value less than the third value when the pit is a non-3-period pit.
- [c18] 18. The method of claim 16 further comprising:
determining the end complement of the pit, the end complement of the pit being determined as a fifth value when there is a 3-period land following the pit, the end complement of the pit being determined as a sixth value less than the fifth value when there is a non-3-period pit following the pit.
- [c19] 19. The method of claim 15 wherein the non-3-period land is one of 4 to 11 periods lands.
- [c20] 20. The method of claim 17 wherein the non-3-period pit is one of 4 to 11 periods pits.
- [c21] 21. The method of claim 15 utilized as a write strategy parameter for a specific burning speed of the optical disk drive and then applying the write strategy parameter in different burning speeds.

- [c22] 22. A method for writing an optical disk by using an optical disk drive comprising:
determining a final end delay time of laser pulses by using the optical disk drive to write a plurality of pits on the optical disk, the final end delay time of a 3-period pit being greater than the final end delay time of a non-3-period pit when there are lands with the same period after the plurality of pits respectively; and
writing the optical disk according to the settings of the laser pulse used by the optical disk drive.
- [c23] 23. The method of claim 22 wherein the final end delay time comprises an end delay time and an end complement determined according to a land following the pit with the final end delay being the difference between the end delay time and the end complement.
- [c24] 24. The method of claim 23 further comprising:
determining an end delay time of the pit, the end delay time of the pit being determined as a first value when the pit is a 3-period pit, the end delay time of the pit being determined as a second value less than the first value when the pit is a non-3-period pit.
- [c25] 25. The method of claim 23 further comprising:
determining an end complement of the pit, the end com-

plement of the pit being determined as a third value when there is a 3-period land following the pit, the end complement of the pit being determined as a fourth value less than the third value when there is a non-3-period pit following the pit.

[c26] 26. The method of claim 22 wherein the non-3-period land is 4 to 11 periods.

[c27] 27. The method of claim 25 wherein the non-3-period pit is 4 to 11 periods.

[c28] 28. The method of claim 22 utilizing a write strategy parameter for a specific burning speed of the optical disk drive and then applying the write strategy parameter to different burning speeds.